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# Library Gateway - Participatory Design

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## PROJECT

# X/O Participatory Design

*Library Website – Winter 2010*

## PROJECT ADMINISTRATORS

Usability Group: Suzanne Chapman (chair), Shevon Desai, Kat Hagedorn, Julie Piacentine, Ken Varnum.  
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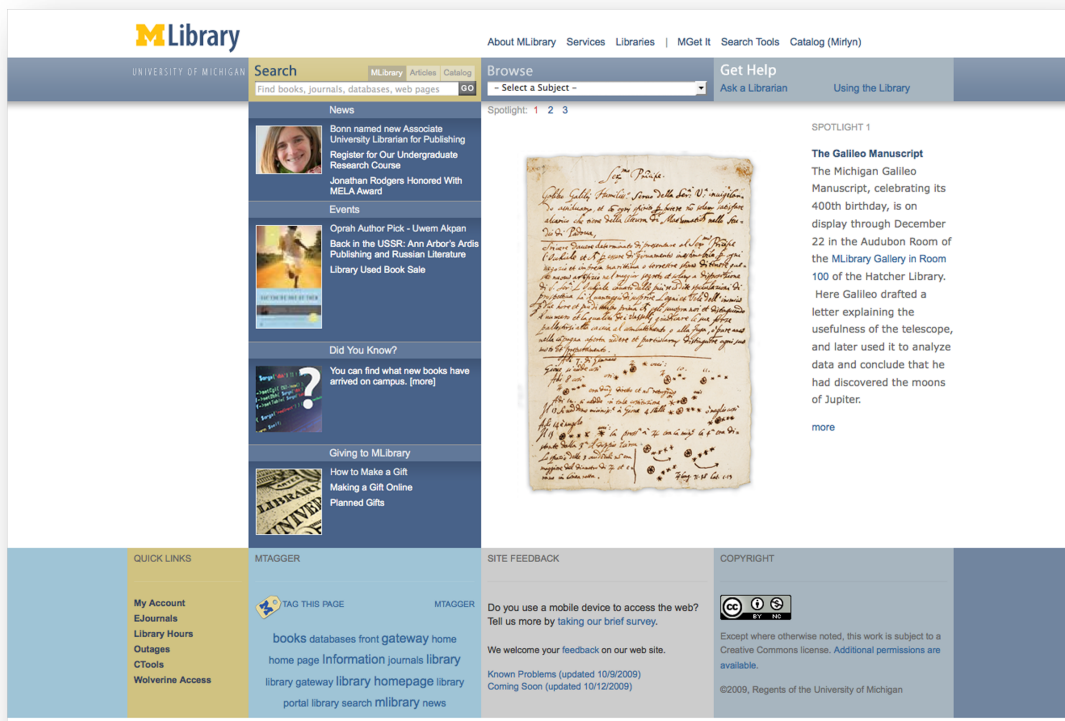
## SHORT DESCRIPTION

Summary of participatory design exercise with undergraduates, graduates, library staff and faculty.

## REPORT INFO

Report date: 7/20/2010

Online location: [www.lib.umich.edu/usability](http://www.lib.umich.edu/usability)



### INTRODUCTION

The University of Michigan University Library website -- <http://www.lib.umich.edu> -- was drastically redesigned and launched on August 3, 2009. It acts as a gateway to the many resources the library provides.

The Usability Group & its Usability Task Force, along with help from an intern from the School of Information, Ellen Wilson, conducted a series of evaluations of the library website during the Fall 2009 and Winter 2010 semesters. A large component of this series was a set of four separate participatory design sessions with undergraduates, graduate students, library staff and faculty. These sessions were sometimes conducted in conjunction with other parallel studies as described in the methodology section. Reports for the other studies are also available on the Usability in the Library website: [www.lib.umich.edu/usability](http://www.lib.umich.edu/usability).

The primary purpose of this exercise was to gain a better understanding of which tools and sections of the library website's home page the participants found most and least useful. Some of the findings resulted in concrete recommendations; others resulted in more questions that will become the basis for future evaluations.

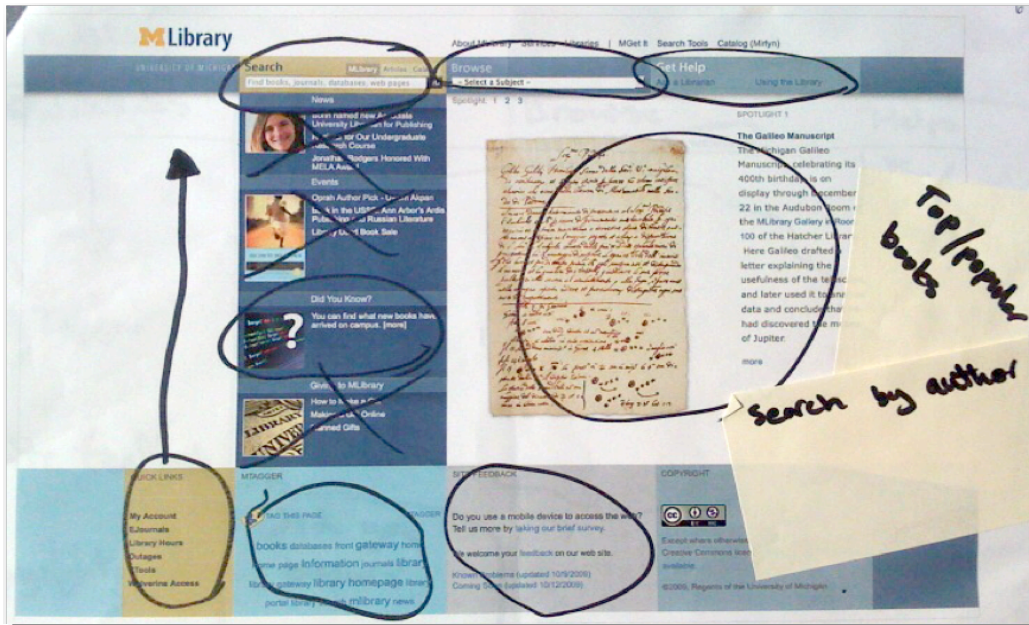
### METHODOLOGY

This report describes a series of "X/O" participatory design exercises where each participant was given a tabloid-sized printout of the library website home page. They were then instructed to circle the things they find useful, make an X through the things they don't find useful, and write-in anything they think is missing. This component of each session took approximately 5-10 minutes. With the exception of the Library Staff Session, each session was facilitated by one leader and accompanied by one note taker. The leader read from a script (Appendix A), while the note taker recorded comments and responses to questions. Once the exercise was completed, the leader was also responsible for asking probative questions; particularly if the participant circled, x-ed or added a post-it note that was not explanatory. Every participant (with the exception of the Library Staff group) was first screened by asking if they had used the library website previously and presented with a link to or image of the website (see Appendix B).

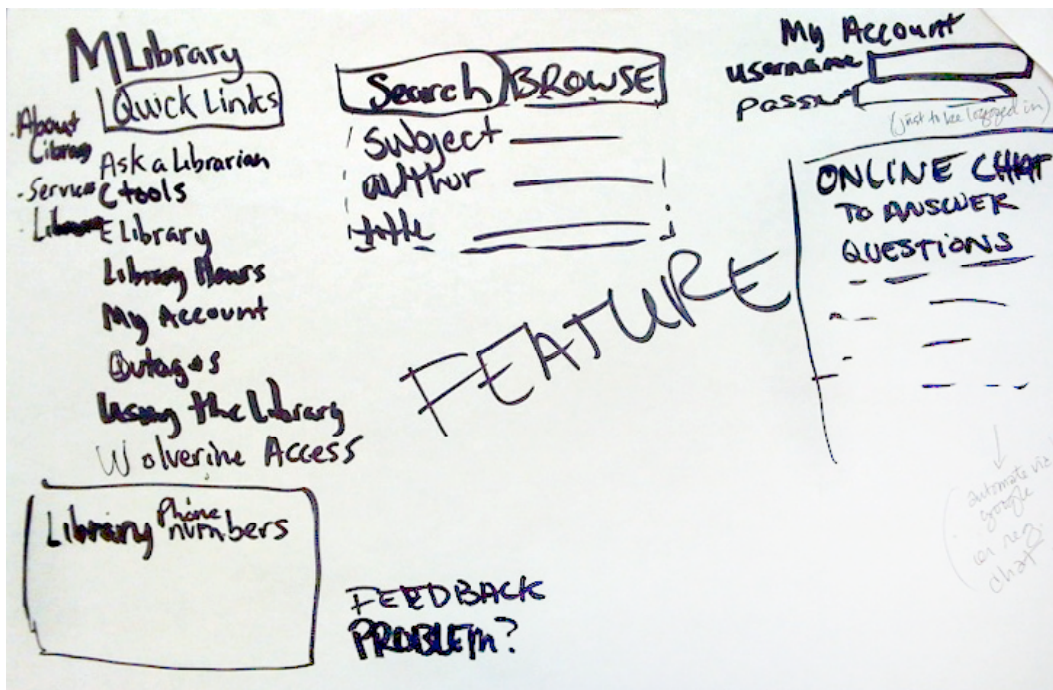
The Undergraduate group was also asked to complete an additional participatory design exercise where they were asked to use a blank tabloid-sized piece of paper to sketch out the layout of their "ideal library website."

The inspiration for this study came from Nancy Foster, Director of Anthropological Research for River Campus Libraries at the University of Rochester.

## Library Website –Participatory Design



Example of an X/O exercise



Example of an ideal design exercise



### Undergraduate Student Session

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- Conducted in March 2010
- 15 participants
- Conducted in a group setting but each participant worked individually
- Session conducted in conjunction with a short mobile library survey and an additional “ideal design” participatory design exercise
- Participants were given \$5 in “blue bucks” (good at campus coffee shops)
- Session held during prime study time in the Undergraduate Library and participants were recruited and screened “on the fly” via handouts (see Appendix B) and an announcement over the PA system

### Graduate Student Session

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- Conducted in March 2010
- 5 participants (3 graduate students, 2 PhD students)
- Conducted in a group setting but each participant worked individually
- Session conducted in conjunction with a card sorting exercise in support of another parallel evaluation.
- Participants were given \$10 in “blue bucks” (good at campus coffee shops)
- 3 participants were recruited via an email (see Appendix C) that was sent via selected Public Services Librarians in order to target faculty in the Social Sciences, Sciences, and Humanities. 2 participants were recruited via personal contacts.

### Faculty Sessions

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- Conducted in March 2010
- 2 participants
- Conducted in individual, separate sessions
- Conducted in conjunction with a card sorting exercise in support of another parallel evaluation.
- Participants were given an MLibrary coffee mug and pen for participating
- One participant was recruited through an email (see Appendix C) that was sent via selected Public Services Librarians in order to target faculty in the Social Sciences, Sciences, and Humanities. The other participant was recruited because they had participated in a previous evaluation and had expressed interest in participating in future evaluations.

### Library Staff Session

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- Conducted in December 2009
- 15 participants
- Conducted in a group setting but each participant worked individually
- Participants were asked to complete the exercise as part of an open, moderated staff feedback session, prior to a discussion about staff experiences working with patrons to use the new website

## RESULTS AND RECOMMENDATIONS

The following results have been organized according to different areas of the current library gateway webpage. The graphics below were created to represent a composite of all the markings for each user group. Green indicates a tally of sections that were circled as “useful” and red indicates a tally of sections X’d out as “not useful.” Some participants marked individual sections of the page and others marked entire sections.

### Left Column Section

Undergraduate Students (15 participants)	Graduate Students (5 participants)
Faculty (2 participants)	Library Staff (15 participants)

## Library Website –Participatory Design

The first three sections of the left column on the library gateway page (“News,” “Events,” and “Did You Know?”) all had mixed responses that varied by user group. Overall, the responses were just slightly on the “useful” side. The “News” and “Events” sections were most popular with library staff and the “Did You Know?” section was most popular with undergraduates. The “Giving to MLibrary” section was overwhelmingly considered “not useful” across all of the user groups.

In the undergraduate session’s “ideal design” exercise, 6 participants included a section labeled something that resembled “News” and 3 participants included a section labeled something that resembled “Events” – just slightly more than had circled it as being useful. On the other side, only 2 participants included something like a “Did You Know” section, a much lower number than the 8 that circled it as being useful.

### Recommendations:

- News & Events: Explore ways to make this content more useful to other non-library staff user groups.
- Did You Know?: Take advantage of popularity of this section with Undergraduates by expanding its use and targeting other user groups.
- Giving to MLibrary: move to somewhere less prominent, like the footer, and/or minimize the amount of space it takes up by making it a link only.

### Quick Links Section

Undergraduate Students (15 participants)	Graduate Students (5 participants)	Faculty (2 participants)	Library Staff (15 participants)

The Quick Links section as a whole was mostly perceived as useful. Based on the total number of times an item was circled for all the user groups, the order of usefulness of the links is: My Account, Library Hours, EJournals, and then a tie between Outages, CTools, and Wolverine Access. However, CTools and Wolverine Access did receive a relatively high number of X's.

Additionally, there were quite a few written comments about adding links, subdividing links listed, and notes and arrows indicating that the location needs to be more prominent.

“Separate internal and external links”

“add webmail but higher”

“Mirlyn link here too would be nice”

## Library Website –Participatory Design

“I use these the MOST! Can you give them more space???” (In reference to My Account, EJournals, Library Hours)

“I never see this- it's too far down on the page”

“this shouldn't be below the fold”

“These should be more visible”

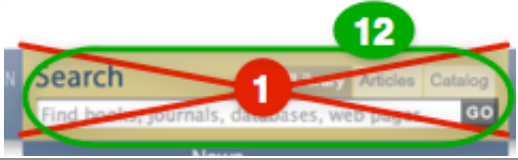

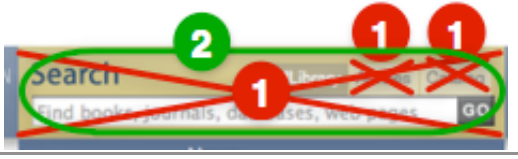

In the undergraduate session’s “ideal design” exercise, additional results include the following:

- 10 out of 15 participants included a form of the Quick Links section but placed it in a much more prominent location somewhere in the top third of the page.
- Many included suggested additions to Quick Links: Webmail, Get Help, Latest Book Received, Maps of the Libraries, Call Numbers, Jstor, Google Scholar, ProQuest, etc.).
- 11 out of 15 participants included either a My Account link or a Login type link somewhere on the page (not necessarily as part of a “Quick Links” section). Some even went as far as specifying what this link would do (e.g., “Items checked out,” “notifications when the book I want will be available,” “Renew,” “My Holds,” “My Network (social networking for the library),” “Notifications”).

### **Quick Links Recommendation:**

1. Move the whole Quick Links section higher on the page. One possibility would be to incorporate it into the left column section in place of one of the less successful sections there.
2. Fine-tune the contents of the Quick Links section. Conduct a Guerrilla test to determine what should be included.
3. Explore options for incorporating more My Account/Login related features.

## Search Box

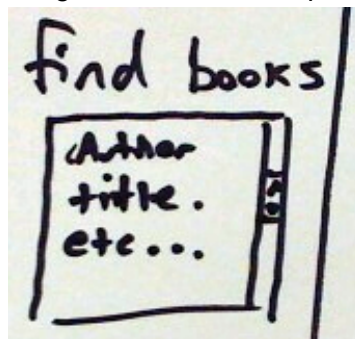
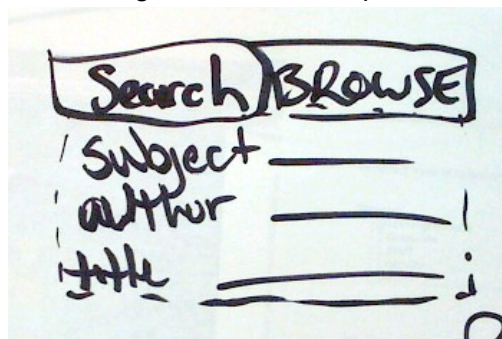
Undergraduate Students (15 participants)	Graduate Students (5 participants)
	
Faculty (2 participants)	Library Staff (15 participants)
	

The Search Box is perceived as a useful feature though specific content and design of this feature had mixed reviews. There were quite a few written and verbal comments pertaining to specifics of how the search options are displayed:

- 4 of 5 graduate students commented on their mark ups about the initial results (i.e. the secondary page after a search is entered). They included:
  - “search that has better results – easier to use”
  - “only want the search function, I just use the library for library materials”
  - “I didn’t realize these were different than Search Tools”
  - “[you] can’t use to find videos.”
- One faculty member commented verbally: “For me it’s all about the search... [not so much about the services].”

In the undergraduate session’s “ideal design” exercise, additional results include the following:

- 14 out of 15 participants included a search in their design.
- 7 out of 14 of the participants who included a search in their design labeled or described it using terms that are specific to a catalog search. For example:



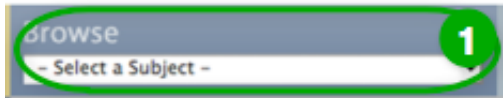





### Recommendations:

1. Reevaluate need for separate search options “articles” and “catalog” by analyzing use logs and conducting follow-up usability evaluations.
2. Evaluate search box language and search results page to explore whether or not the search *should* focus more on catalog results.

### Browse

Undergraduate Students (15 participants)	Graduate Students (5 participants)
	
Faculty (2 participants)	Library Staff (15 participants)
	

The browse section allows users to navigate a list of all the different subject areas represented at the University of Michigan and supported by the library. Once a subject is selected, a list of a variety of resources is listed: subject guides, databases, etc. A majority of the undergraduates found the Browse section to be useful. Interestingly, not many of the library staff marked this section either way.

In the undergraduate session’s “ideal design” exercise, 7 of the participants included a Browse feature, fewer than the number who circled it as useful. One of the participants drew it as two drop-down boxes, one labeled “Major” and then “Select a subject.”

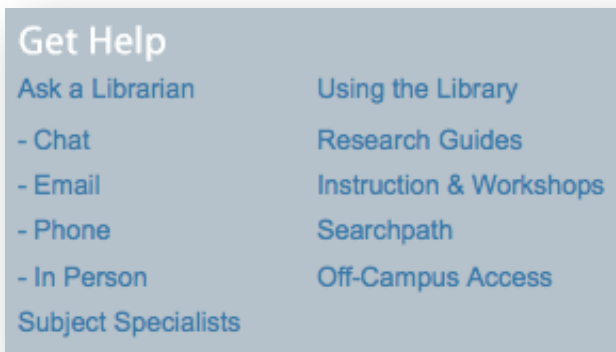
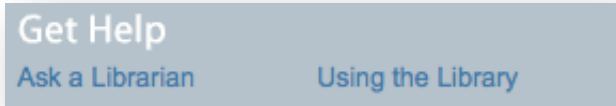
### Recommendations:

- Results are unclear. The undergraduates overwhelmingly marked the browse feature as useful, but the other user groups did not. This could be because it is not targeted towards their needs, or we might want to explore making it more prominent on the page.



## Get Help Section

The Get Help section in the header expands to reveal more links when the user hovers over the section. Since this exercise was conducted using paper printouts, the participants did not experience the full contents of this section. Here is what the section looks like before and during hover:



Undergraduate Students (15 participants)	Graduate Students (5 participants)
Faculty (2 participants)	Library Staff (15 participants)

The Get Help section is the primary portal to navigating the site's many research services and subject area content. In theory, this should be one of the most "useful" sections on the site yet it did not receive a high number of "useful" marks. It is not clear from this exercise whether or not the participants would find the contents of this section useful or if they were just reacting to the few labels presented in the compressed form of this section.

## Library Website –Participatory Design

In the undergraduate session's "ideal design" exercise, 7 out of 15 participants included something that resembled "Get Help" but was also described as "Help," "Research Help," and "Ask a Librarian." And 3 of these participants also drew an actual chat widget.

### Recommendations:

- Determine the perceived usefulness of the content found in this section by repeating the exercise but displaying this area in its expanded form
- Consider exposing the Ask a Librarian services more – especially the chat service.

### Top Navigation

Undergraduate Students (15 participants)	
Graduate Students (5 participants)	
Faculty (2 participants)	
Library Staff (15 participants)	

All links in this top navigation row were perceived as useful by at least a portion of each user group. There were, however, a few that stood out as being more or less useful than the others.

**A.** The Catalog (Mirlyn) link in the top navigation bar was perceived as a useful tool by a majority of all participants and was not crossed out by any participants. The table below displays the data gathered from the marked pages; the number in parenthesis indicates the total number of participants.

## Library Website –Participatory Design

	<b>Circled</b>	<b>X-ed</b>	<b>Didn't mark anything</b>
<b>Undergrad</b>	8 (15)	0 (15)	7 (15)
<b>Grad</b>	5 (5)	0 (5)	0 (5)
<b>Faculty</b>	1 (2)	0 (2)	1 (2)
<b>Staff</b>	9 (15)	0 (15)	6 (15)
<b>TOTAL</b>	<b>23 (36)</b>	<b>0 (36)</b>	<b>14 (36)</b>

**B.** Search Tools had mixed perceptions, though the data gathered indicates the tool is perceived to be useful more often than it is perceived as not useful. The table below displays the data gathered from the marked pages; the number in parenthesis indicates the total number of participants.

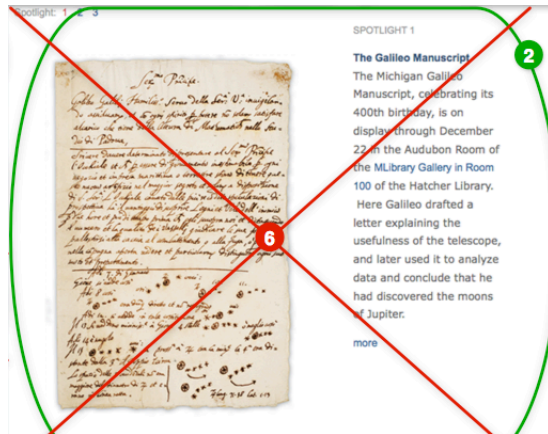
	<b>Circled</b>	<b>X-ed</b>	<b>Didn't mark anything</b>
<b>Undergrad</b>	4 (15)	1 (15)	10 (15)
<b>Grad</b>	2 (5)	1 (5)	3 (5)
<b>Faculty</b>	1 (2)	0 (2)	1 (2)
<b>Staff</b>	9 (15)	0 (15)	6 (15)
<b>TOTAL</b>	<b>N (36)</b>	<b>N (36)</b>	<b>N (36)</b>

### **Recommendation:**

1. Conduct a follow up evaluation to fine-tune labeling and contents of this section.

## Spotlight

The spotlight section is currently set to show one of three images with a short description of the many library treasures we have in our collection. New items are added every week.

Undergraduate Students (15 participants)	Graduate Students (5 participants)
 <p>Spotlight: 1 2 3</p> <p>SPOTLIGHT 1</p> <p><b>The Galileo Manuscript</b> The Michigan Galileo Manuscript, celebrating its 400th birthday, is on display through December 22 in the Audubon Room of the MLibrary Gallery in Room 100 of the Hatcher Library. Here Galileo drafted a letter explaining the usefulness of the telescope, and later used it to analyze data and conclude that he had discovered the moons of Jupiter.</p> <p><a href="#">more</a></p>	 <p>Spotlight: 1 2 3</p> <p>SPOTLIGHT 1</p> <p><b>The Galileo Manuscript</b> The Michigan Galileo Manuscript, celebrating its 400th birthday, is on display through December 22 in the Audubon Room of the MLibrary Gallery in Room 100 of the Hatcher Library. Here Galileo drafted a letter explaining the usefulness of the telescope, and later used it to analyze data and conclude that he had discovered the moons of Jupiter.</p> <p><a href="#">more</a></p>
Faculty (2 participants)	Library Staff (15 participants)
 <p>Spotlight: 1 2 3</p> <p>SPOTLIGHT 1</p> <p><b>The Galileo Manuscript</b> The Michigan Galileo Manuscript, celebrating its 400th birthday, is on display through December 22 in the Audubon Room of the MLibrary Gallery in Room 100 of the Hatcher Library. Here Galileo drafted a letter explaining the usefulness of the telescope, and later used it to analyze data and conclude that he had discovered the moons of Jupiter.</p> <p><a href="#">more</a></p>	 <p>Spotlight: 1 2 3</p> <p>SPOTLIGHT 1</p> <p><b>The Galileo Manuscript</b> The Michigan Galileo Manuscript, celebrating its 400th birthday, is on display through December 22 in the Audubon Room of the MLibrary Gallery in Room 100 of the Hatcher Library. Here Galileo drafted a letter explaining the usefulness of the telescope, and later used it to analyze data and conclude that he had discovered the moons of Jupiter.</p> <p><a href="#">more</a></p>

The Spotlight had mixed perceptions; based on user group it varied from ambivalence to being perceived as not useful. The majority of graduate students and a little less than half of library staff perceived it as “not useful.” In contrast, the undergraduate students seemed quite a bit more ambivalent (with 0 X’s and 2 circles).

	<b>Circled</b>	<b>X-ed</b>	<b>Didn’t mark anything</b>
<b>Undergrad</b>	2 (15)	0 (15)	13 (15)
<b>Grad</b>	1 (5)	4 (5)	0 (5)
<b>Faculty</b>	1 (2)	1 (2)	0 (2)
<b>Staff</b>	2 (15)	7 (15)	6 (15)
<b>TOTAL</b>	<b>6 (36)</b>	<b>12 (36)</b>	<b>19 (36)</b>

A few participants wrote in comments about the size of the Spotlight section:

“too big”

“This takes up too much space”

“this is nice but takes up too much room”

In the undergraduate session’s “ideal design” exercise, additional results include the following:

- 7 out of 15 undergraduates specifically designated an area labeled Spotlight on their “ideal designs” and 3 additional undergraduates have a blank space where Spotlight normally is.
- A few suggested alternative uses for the Spotlight. For example, “most popular books,” “History of some important document, text, book, or sermon,” “News and Fun Facts,” “Interesting article spotlight.”

The undergraduate group’s responses in the X/O and ideal design exercise seem to indicate that though they may not find it “useful,” they do recognize some value in the Spotlight section. Likewise, one faculty participant verbally commented that the Spotlight is interesting, although not personally useful.

### **Recommendations:**

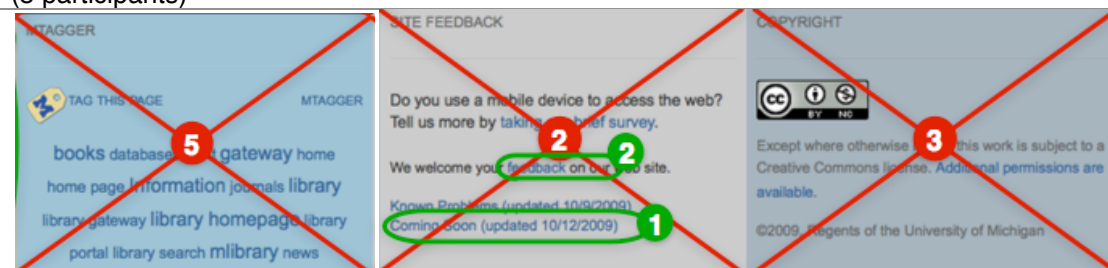
1. Consider expanding scope of content in the Spotlight to include more items or services that are directly relevant to patrons such as featured guides, popular books, digital collections, etc.
2. Since the overall layout of the page is connected to the size of the spotlight, consider scaling it down in future iterations of the design.

## Footer: MTagger, Site Feedback, Copyright

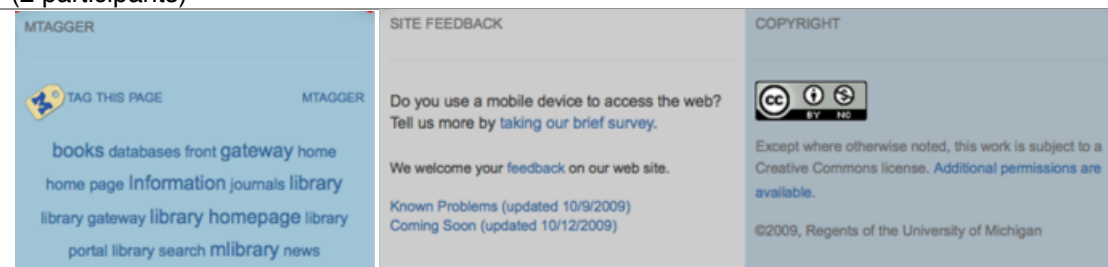
### Undergraduate Students (15 participants)



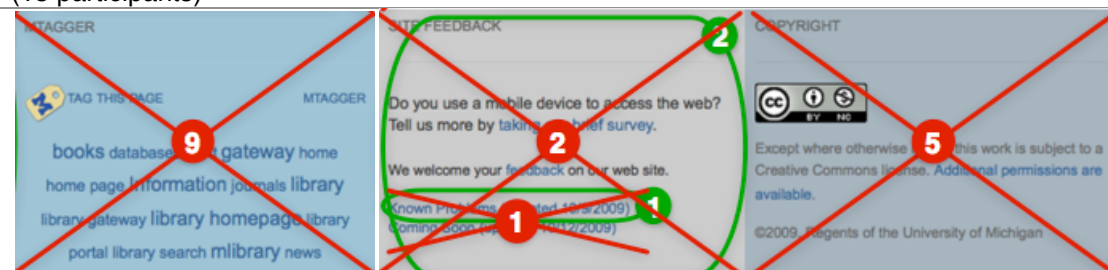
### Graduate Students (5 participants)



### Faculty (2 participants)



### Library Staff (15 participants)



MTagger is an experimental tagging tool that allows users to tag pages/items within the library web site, Mirlyn Catalog, institutional repository, and digital collections.

MTagger received a relatively high percentage of “not useful” markings. The comments made about this feature may suggest the reason for this trend. One faculty participant noted on their marked page “I don’t know what this is.” A graduate student wrote “this may be useful, but never



tried it.” An undergraduate student wrote, “never used,” while another wrote “don’t see use of it.” These results confirm what we already know about the tool’s low use.

The rest of the footer section (Site Feedback and Copyright information) is primarily information we are obliged to provide on every page of the website.

In the undergraduate session’s “ideal design” exercise:

- 1 out of 15 participants included MTagger
- 9 out of 15 participants included Feedback
- 6 out of 15 participants included Copyright

### **Recommendations:**

- Discussions about what to do with the MTagger tool have already begun. Follow-up evaluations would be useful in helping to make decisions about how to transform this tool.
- In a future redesign, consider de-emphasizing footer content.

### Additional Results from the “Ideal Design” exercise

Many of the undergraduate participants included items in their “ideal website” drawings that are not visible in the current design. Here are some themes that emerged:

- New Books, described as: “Latest Books,” “Top/Popular Books,” “New arrivals –DVD’s – Books -...more,” “ebooks”
- Library Hours: displayed as a widget or expanded info showing actual hours
- Reserves & Required Course Materials: “Reserves,” search labeled “Enter a class name and find book required”
- Interactive features: search labeled “Want to know how packed the library is right now? Enter time & floor,” “Book location,” and “maps of libraries around campus”

### Lessons Learned

- Compared to other methodologies we have used in the past, participants in this study seemed particularly enthusiastic about participating – perhaps due to the fact that this technique has a more “game-like” feeling than the standard task-based evaluation.
- The planning and set up for these sessions was extremely easy and fast but analyzing the results was labor-intensive. The analysis also required more subjective interpretation than a task-based usability test.
- We found these results to be extremely interesting because we were open to any kind of response and not focused on “fixing” any specific feature. Used in conjunction with other, more focused projects, this was a very valuable study.

### Appendix A – Exercise Script \*Partial

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My name is [NAME]. I'm a librarian at the University and will be coordinating our session today. I'm joined by [NAME] who is here to observe and take notes.

*[Collect their name, status, specialization and give them their gift]*

First, some basic information. Thank you for agreeing to participate in a usability study for the MLibrary website. We appreciate your contribution to our research and to the improvement of our libraries. We will use the information you provide anonymously and combine it with similar information from other participants. Then, we will interpret the data to draw conclusions about how library resources are used and how the library can improve our websites. A summary of our findings will be reported to library staff and may be made public on our website but the report will not include any information that could identify you.

*[Be sure that the image of the website is in front of them to use it as a reference to the term 'library website']*

When was the last time you used the library website? Do you remember what you used it for?

Here is what we would like you to do. This sheet of paper is a representation of the front page of the website. Please circle what you find useful and x through what you don't find useful. If you think something should be added to the page, we have sticky notes for you to use.

Do you have any questions?

*[Ask follow up questions to understand something that doesn't seem obvious]*

**\*\*Card Sort Information Removed\*\***

### **Conclusion**

Thank you once again for your participation and your input. Is there anything you would like to add?

## Appendix B – Undergraduate Participant Recruitment Handout

### Want to make \$5 for 15 min?



Help us improve our library websites by answering a few questions & get \$5 in blue bucks!

Where: Askwith Library  
Screening Room (UGLi 2160)

When: Monday 12/7 5-7 pm

Questions?  
Contact us: [ul-usability@umich.edu](mailto:ul-usability@umich.edu)

### Appendix C – Email to Selectors

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The Usability Group is conducting a series of participatory design exercises to help the Library evaluate its website. Undergraduate and staff sessions took place last term and provided very useful data. Now we would like to extend the study to graduate students and faculty who might be particularly invested in helping us improve our website. That's where you come in.

Could you please forward the following messages to those you feel would be a good fit for our studies? Thank you!

GRAD:

Greetings,

Have you used the MLibrary website -- <http://www.lib.umich.edu> -- recently? If yes, then we'd like to ask you a few questions to help us improve the user experience of our website. The session will take about 40 minutes, will take place in the library, and will pay ten BlueBucks, good for use at any University Union facility, such as Bert's, Mujo's and Beansters.

If you are interested in participating, please contact [ellenkw@umich.edu](mailto:ellenkw@umich.edu) with your name, email, subject area, and possible available times during the second week of March (3.8-3.12).

FACULTY:

Greetings,

Have you used the MLibrary website -- <http://www.lib.umich.edu> -- recently? If yes, then we'd like to ask you a few questions to help us improve the user experience of our website. The session will only take 30 minutes and we can meet you in the library or your office.

If you are interested in participating, please contact [ellenkw@umich.edu](mailto:ellenkw@umich.edu) with your name, email, subject area, and possible available times during the second week of March (3.8-3.12).